

AMENDMENT UNDER 37 C.F.R. § 1.114(c)

U.S. Application No.: 09/940,474

Attorney Docket No.: Q65911

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently amended) A separator for non-aqueous electrolyte secondary battery, wherein the separator comprises a shut-down layer, a heat-resistant microporous layer, and a spacer having a form of particles, fibers, net or porous film on the surface of the heat-resistant microporous layer,

wherein the heat-resistant microporous layer comprises at least one heat-resistant resin selected from resins having a temperature of deflection under load of 18.6 kg/cm^2 of 100°C or more, and

~~wherein the thickness of the spacer is from 0.02 to $3\mu\text{m}$~~ the spacer comprises a fluorine-containing polymer.

2. (Original) The separator for non-aqueous electrolyte secondary battery according to claim 1, wherein the heat-resistant microporous layer consists of heat-resistant resin.

Claims 3-4 (Canceled)

AMENDMENT UNDER 37 C.F.R. § 1.114(c)

U.S. Application No.: 09/940,474

Attorney Docket No.: Q65911

5. (Original) The separator for non-aqueous electrolyte secondary battery according to claim 1, wherein the spacer has a form of particles and a particle diameter of 3 μm or less.

6. (Original) The separator for non-aqueous electrolyte secondary battery according to claim 1, wherein the static friction coefficient between the spacer-disposed separator surface and a stainless steel surface ground by a 1000 grit polishing paper is 0.5 or less.

7. (Currently amended) The separator for non-aqueous electrolyte secondary battery according to claim 1, wherein the spacer is formed by coating an application liquid containing an ~~electrochemically stable substance~~ a fluorine-containing polymer on the surface of the heat-resistant microporous layer.

8. (Previously presented) The separator for non-aqueous electrolyte secondary battery according to claim 7, wherein the application liquid is a suspension.

Claim 9 (Canceled)

10. (Currently amended) A non-aqueous electrolyte secondary battery including the separator for non-aqueous electrolyte battery according to any one of ~~claims 1 to 8~~ claims 1-2, 5-8.

AMENDMENT UNDER 37 C.F.R. § 1.114(c)

U.S. Application No.: 09/940,474

Attorney Docket No.: Q65911

11. (Original) The non-aqueous electrolyte secondary according to claim 10, wherein the spacer is adjacent to a cathode.

12. (Currently amended) A separator for non-aqueous electrolyte secondary battery, the separator comprising a shut down layer, a heat-resistant microporous layer, and a spacer having a form of particles, fibers, net or porous film, on the surface of the heat-resistant microporous layer, wherein the heat-resistant microporous layer comprises at least one heat-resistant resin selected from resins having a temperature of deflection under load of 18.6 kg/cm^2 of 100°C or more, and the shut-down layer, the heat-resistant microporous layer and the spacer being in this order, wherein the spacer comprises a fluorine containing polymer.

13. (New) The separator for non-aqueous electrolyte secondary battery according to claim 1, wherein the thickness of the spacer is from 0.02 to 3 μm .